



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R10-OAR-2015-0067; FRL-9954-56-Region 10]

Partial Approval and Partial Disapproval of Attainment Plan for the Idaho Portion of the Logan, Utah/Idaho PM_{2.5} Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: Franklin County, Idaho is a rural and sparsely populated county adjacent to Cache County, Utah. In 2009, the Environmental Protection Agency (EPA) designated Cache County, along with Franklin County, as part of the multi-state Logan, Utah-Idaho fine particulate matter (PM_{2.5}) nonattainment area (Logan UT-ID). On December 14, 2012, the Idaho Department of Environmental Quality (IDEQ) submitted a State Implementation Plan (2012 SIP submittal) to address attainment planning requirements for the Idaho portion of the Logan UT-ID nonattainment area. On December 24, 2014, the IDEQ submitted a supplement to the 2012 SIP submission that included additional analysis (2014 amendment). The EPA has evaluated the 2012 SIP submittal and 2014 amendment to determine whether the submissions meet the applicable Clean Air Act (CAA) requirements. Based on this evaluation, the EPA is proposing to approve certain provisions and disapprove other provisions of the 2012 SIP submittal and 2014 amendment.

DATES: Written comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-R10-OAR-2015-0067

at <http://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

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SUPPLEMENTARY INFORMATION: Throughout this document, wherever “we”, “us” or “our” are used, it is intended to refer to the EPA.

TABLE OF CONTENTS:

- I. Background for the EPA’s Proposed Action
 - A. History of the PM_{2.5} Standard
 - B. Effect of the January 4, 2013 D.C. Circuit Decision Regarding PM_{2.5} Implementation Under Subpart 4
 - C. CAA PM_{2.5} Nonattainment Area Requirements
- II. Analysis of Idaho’s Submittals
 - Previously Approved Attainment Plan Elements*
 - A. Classifications
 - B. Emissions Inventory
 - C. Control Measures
 - Attainment Plan Elements Proposed for Approval and Disapproval*
 - D. Attainment Date

- E. Attainment Demonstration and Modeling
- F. Characterization of Franklin County Air Shed
- G. Reasonably Available Control Measures / Reasonably Available Control Technology (RACM/RACT)
- H. Contingency Measures
- I. Reasonable Further Progress (RFP) and Quantitative Milestones
- Additional Elements*
- J. Conformity Requirements
- III. Proposed Action
- IV. Statutory and Executive Order Reviews

I. Background for the EPA's Proposed Action

A. History of the PM_{2.5} Standard

On July 18, 1997, the EPA established the 1997 PM_{2.5} National Ambient Air Quality Standards (NAAQS), including an annual standard of 15.0 µg/m³ based on a 3-year average of annual mean PM_{2.5} concentrations, and a 24-hour (or daily) standard of 65 µg/m³ based on a 3-year average of the 98th percentile of 24-hour concentrations (62 FR 38652). The EPA established the 1997 PM_{2.5} NAAQS based on significant evidence and numerous health studies demonstrating the serious health effects associated with exposures to PM_{2.5}. To provide guidance on the CAA requirements for state and tribal implementation plans to implement the 1997 PM_{2.5} NAAQS, the EPA promulgated the "Final Clean Air Fine Particle Implementation Rule" (72 FR 20586, April 25, 2007) (hereinafter, the "2007 PM_{2.5} Implementation Rule").

On October 17, 2006, the EPA strengthened the 24-hour PM_{2.5} NAAQS to 35 µg/m³ and retained the level of the annual PM_{2.5} standard at 15.0 µg/m³ (71 FR 61144). Following promulgation of a new or revised NAAQS, the EPA is required by the CAA to promulgate designations for areas throughout the United States; this designation process is described in section 107(d)(1) of the CAA. On November 13, 2009, the EPA designated areas as either attainment/unclassifiable or nonattainment with respect to the revised 2006 24-hour PM_{2.5}

NAAQS (74 FR 58688). In that November 2009 action, the EPA designated Franklin County, Idaho, as part of the cross-state Logan UT-ID nonattainment for the 2006 24-hour PM_{2.5} NAAQS, requiring Idaho to prepare and submit an attainment plan to meet the revised 24-hour PM_{2.5} NAAQS. The EPA included Franklin County in the nonattainment area due to Idaho emission sources, particularly motor vehicle commuter patterns, contributing to violations of the 24-hour PM_{2.5} NAAQS recorded at the Logan, Cache County, Utah monitor, based on 2006 to 2008 ambient air quality data.

On March 2, 2012, the EPA issued “Implementation Guidance for the 2006 24-Hour Fine Particulate (PM_{2.5}) National Ambient Air Quality Standards (NAAQS)” to provide guidance on the development of SIPs to demonstrate attainment with the revised 24-hour standard (March 2012 Implementation Guidance). The March 2012 Implementation Guidance explained that the overall framework and policy approach of the 2007 PM_{2.5} Implementation Rule provided effective and appropriate guidance on statutory requirements for the development of SIPs to attain the 2006 24-hour PM_{2.5} NAAQS. Accordingly, the March 2012 Implementation Guidance instructed states to rely on the 2007 PM_{2.5} Implementation Rule in developing SIPs to demonstrate attainment with the 2006 24-hour PM_{2.5} NAAQS.

B. Effect of the January 4, 2013 D.C. Circuit Court Decision Regarding PM_{2.5} Implementation Under Subpart 4

On January 4, 2013, the D.C. Circuit Court issued a decision in *NRDC v. EPA*, 706 F.3d 428, holding that the EPA erred in implementing the 1997 PM_{2.5} NAAQS pursuant only to the general implementation requirements of subpart 1, part D of title I of the CAA, rather pursuant to the implementation requirements specific to particulate matter (PM₁₀) in subpart 4, part D of title I of the CAA (“subpart 4”). The court reasoned that the plain meaning of the CAA requires implementation of the 1997 PM_{2.5} NAAQS under subpart 4 because PM_{2.5} particles fall within

the statutory definition of PM₁₀ and thus implementation of the PM_{2.5} NAAQS is subject to the same statutory requirements as the PM₁₀ NAAQS. The Court did not vacate the 2007 PM_{2.5} Implementation Rule but remanded the rule with instructions for the EPA to promulgate new implementation regulations for the PM_{2.5} NAAQS in accordance with the requirements of subpart 4. On June 6, 2013, consistent with the Court's remand decision, the EPA withdrew its March 2012 Implementation Guidance which relied on the 2007 PM_{2.5} Implementation Rule to provide guidance for the 2006 24-hour PM_{2.5} NAAQS.

Prior to the January 4, 2013 Court decision, states had worked towards meeting the air quality goals of the 2006 PM_{2.5} NAAQS in accordance with the EPA regulations and guidance derived from subpart 1 of Part D of Title I of the CAA. The EPA considered this history in issuing the PM_{2.5} Subpart 4 Nonattainment Classification and Deadline Rule (2014 Classification and Deadline Rule)(79 FR 31566, June 2, 2014) that identified the initial classification under subpart 4 for areas currently designated nonattainment for the 1997 and/or 2006 PM_{2.5} standards as Moderate. The final rule also established December 31, 2014 as the deadline for the states to submit any additional SIP elements related to attainment. On December 24, 2014, the IDEQ supplemented the 2012 SIP submission to address the Court's decision.

C. CAA PM_{2.5} Moderate Area Nonattainment Requirements

With respect to the requirements for attainment plans, the EPA notes that the general nonattainment area planning requirements are found in subpart 1, and the Moderate area planning requirements for particulate matter are found in subpart 4. The EPA has a longstanding general guidance document that interprets the 1990 amendments to the CAA commonly referred to as the "General Preamble" (57 FR 13498, April 16, 1992). The General Preamble addresses the relationship between subpart 1 and subpart 4 requirements and provides recommendations to

states for meeting statutory requirements for particulate matter nonattainment planning. Specifically, the General Preamble explains that requirements applicable to Moderate area nonattainment SIPs are set forth in subpart 4, but such SIPs must also meet the general nonattainment planning provisions in subpart 1, to the extent these provisions “are not otherwise subsumed by, or integrally related to,” the more specific subpart 4 requirements (57 FR 13538). In addition, on August 24, 2016, the EPA issued a final rule establishing requirements applicable to nonattainment areas for current and future PM_{2.5} NAAQS in response to the vacatur of the 2007 implementation rule. *Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements*, 81 FR 58010 (August 24, 2016). While that rule is not effective until October 24, 2016, the EPA considered the guidance contained in the final rule when evaluating the SIP submission at issue.

The requirements of subpart 1 for attainment plans include: (i) the section 172(c)(1) requirements for reasonably available control measures (RACM), reasonably available control technology (RACT) and attainment demonstrations; (ii) the section 172(c)(2) requirement to demonstrate reasonable further progress (RFP); (iii) the section 172(c)(3) requirement for emissions inventories; (iv) the section 172(c)(5) requirements for a nonattainment new source review (NSR) permitting program; and (v) the section 172(c)(9) requirement for contingency measures.

Several subpart 4 requirements for Moderate areas are comparable with subpart 1 requirements and include: (i) the section 189(a)(1)(A) NSR permit program requirements; (ii) the section 189(a)(1)(B) requirements for an attainment demonstration; (iii) the section 189(a)(1)(C) requirements for RACM; and (iv) the section 189(c) requirements for RFP and quantitative

milestones. In addition, under subpart 4 the Moderate area attainment date is no later than the end of the 6th calendar year after designation.

The EPA has evaluated the 2012 SIP submittal and 2014 amendment to determine whether they meet the applicable Clean Air Act (CAA) requirements. Based on this evaluation, the EPA is proposing to approve certain provisions and disapprove other provisions of the 2012 SIP submittal and 2014 amendment.

II. Analysis of Idaho's Submittals

The attainment plan elements that the IDEQ submitted for Franklin County included base year and attainment year emissions inventories that addressed direct particulate matter emissions and all particulate matter precursors, an analysis of RACM and RACT, contingency measures, and reasonable further progress addressed through the attainment demonstration. The attainment plan's strategy for controlling direct and precursor PM_{2.5} emissions relied primarily on a mandatory episodic woodstove curtailment program, the change-out of uncertified woodstoves, revised road sanding practices, and expected direct PM_{2.5} and PM_{2.5} precursor reductions from the Tier 2 Federal Motor Vehicle Emission Requirements (65 FR 6698, February 10, 2000).

Previously Approved Attainment Plan Elements

A. Classifications

The applicable attainment planning requirements under subpart 4 (section 189(a) and (b)) depend on whether the nonattainment area is classified as Moderate or Serious. In response to the Court's decision in *NRDC v. EPA*, the EPA finalized on June 2, 2014, initial classifications of all current 1997 and 2006 PM_{2.5} nonattainment areas as Moderate (79 FR 31566). Thus, the IDEQ's 2012 SIP submittal and the 2014 amendment for Franklin County is evaluated pursuant to the Moderate area requirements of subpart 4.

B. Emissions Inventory

On May 14, 2014, we proposed approval of the baseline emissions inventory included as part of Idaho's 2012 submittal (79 FR 27543). The emissions inventory covered direct PM_{2.5} and precursors to the formation of PM_{2.5} (nitrogen oxides (NO_x), volatile organic compounds (VOCs), ammonia (NH₃), and sulfur dioxide (SO₂)) to meet the comprehensive emissions inventory requirement of CAA section 172(c) for the 2006 24-hour PM_{2.5} NAAQS. We received no comments on our proposed rulemaking and finalized our approval on July 18, 2014 (79 FR 41904). We are not taking comments on the inventory as part of this action.

C. Control Measures

The December 14, 2012 attainment plan submitted by the IDEQ included permanent and enforceable Franklin County, City of Clifton, City of Dayton, Franklin City, City of Oxford, City of Preston, and City of Weston ordinances implementing the mandatory woodstove curtailment and burn ban programs. The IDEQ's Air Quality Index (AQI) program supports the local jurisdictions by instituting mandatory burn bans for uncertified woodstoves when PM_{2.5} concentration levels are at or forecasted to reach 25.4 µg/m³. Each of the adopted ordinances ban open burning of any kind during burn ban days, ban the sale or installation of non-EPA certified devices in new or existing buildings, and prohibit the construction of any building for which a solid fuel burning device is the sole source of heat. On March 25, 2014, the EPA approved the ordinances submitted in the attainment plan because they provided important PM_{2.5} reductions in the nonattainment area and strengthened the Idaho SIP (79 FR 16201). By including these measures in the SIP, the State has made them permanent and enforceable. With the EPA's approval of these control measures on March 25, 2014, the measures have become federally enforceable. The EPA already provided notice and comment on the proposed approval

of these ordinances into the SIP on December 26, 2013 (78 FR 78315), and we are not taking comment on those provisions.

In our March 25, 2014 action, the EPA also approved road sanding agreements between the IDEQ, Franklin County Road and Bridge, and the Idaho Transportation Department to reduce the contribution of primary PM_{2.5} from reentrained dust on paved roads. Although the road sanding agreements were expected to reduce emissions of PM_{2.5}, we determined that the agreements were not directly enforceable. However, the road sanding agreements are similar to agreements previously approved by the EPA as voluntary measures in the Idaho SIP (70 FR 29247), and consistently implemented by the relevant state and county governments.¹ Accordingly, the EPA approved the road sanding agreements as voluntary measures in accordance with existing guidance.² Lastly, in the 2012 SIP submittal and 2014 amendment, the IDEQ also quantified the emission reduction benefits from three woodstove change-out programs conducted in 2006-2007, 2011-2012, and 2013-2014 that replaced a total of 212 units, with annual estimated emissions reductions of 8.04 tons per year (tpy) PM_{2.5}, 0.47 tpy NO_x, and 18.57 tpy VOC. Further details on these control measures can be found in the docket for this action as well as in the proposed and final *Federal Register* notices approving these measures (78 FR 78315 and 79 FR 16201). The EPA is not taking comment on these approved actions.

Attainment Plan Elements Proposed For Approval and Disapproval

D. Attainment Date

The CAA requirements of subpart 4 include a demonstration that a nonattainment area will meet applicable NAAQS within the timeframe provided in the statute (section 189(a)(1)(B)).

¹ In a letter dated February 26, 2016, included in the docket for this action, the IDEQ included an update on the continued implementation of the road sanding agreement with Franklin County Road and Bridge.

² Incorporating Emerging and Voluntary Measures in a State Implementation Plan (Sept. 2004).

For the 2006 PM_{2.5} 24-hour NAAQS, an attainment plan must show that a Moderate nonattainment area will attain the standard as expeditiously as practicable but no later than the end of the sixth calendar year after the area's designation, which in the case of Franklin County was December 31, 2015.

E. Attainment Demonstration and Modeling

Section 189(a)(1)(B) requires that a Moderate area nonattainment plan contain either a demonstration that the plan will provide for attainment by the applicable attainment date, or a demonstration that attainment by such date is impracticable. Due to the multi-state nature of the shared Logan UT-ID air shed and the location of the violating monitor in Logan, Utah, the Utah Department of Air Quality (UDAQ) conducted the attainment demonstration for the entire nonattainment area with IDEQ's active participation. This attainment demonstration was included in Appendix D of IDEQ's 2012 SIP submittal. In response to the EPA's 2014 Classification and Deadline Rule, IDEQ again worked with the UDAQ to update the attainment demonstration with new modeling based on more recent emission inventory information. This updated modeling, cited in the 2014 amendment, demonstrated attainment by the subpart 4 attainment date of December 31, 2015.

The EPA is proposing to disapprove the attainment demonstration because the area did not, in fact, attain the NAAQS by December 31, 2015.

F. Characterization of the Franklin County Air Shed

In evaluating the 2012 SIP submission and 2014 amendment under the requirements of subpart 4, control of direct PM_{2.5} and precursors must be considered. According to CAA section 302(g) the term "air pollutant" means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special

nuclear material, and by product material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term “air pollutant” is used. The provisions of subpart 4 do not define the term “precursor” for purposes of particulate matter, nor do they explicitly require the control of any specifically identified precursor. However, the EPA has long recognized the scientific basis for concluding that SO₂, NO_x, VOC, and ammonia are precursors to PM₁₀ and to PM_{2.5} (81 FR 58018-19).

The EPA’s interpretation of section 189(e) and section 172 indicates that consideration of all precursors is necessary for PM_{2.5} attainment plans, and RACM/RACT requirements explicitly require the evaluation of available control measures for direct PM_{2.5} emissions and precursor emissions from stationary, area, and mobile sources in order to attain as expeditiously as practicable. Section 189(e) requires the control of appropriate precursors from major stationary sources, unless the Administrator determines that precursor emissions from such major stationary sources do not contribute significantly to nonattainment in the area.

Subpart 4 expressly requires control of precursors from major stationary sources where direct PM from major sources is controlled unless certain conditions are met; however, other sources of precursors may also need to be controlled for the purposes of demonstrating attainment as expeditiously as practicable in a given area. Thus, the statute requires states with Moderate nonattainment areas to evaluate available control measures for all sources of direct PM_{2.5} and PM_{2.5} precursor emissions to determine whether such measures are economically and technologically feasible, and to adopt all measures that are deemed reasonable and are necessary to demonstrate attainment as expeditiously as possible (e.g., all measures constituting RACM

and RACT controls for sources located in the area). The EPA has interpreted subpart 4 to require control of precursors from all source categories in a given nonattainment area, unless there is a demonstration that controlling a precursor or precursors is not necessary for expeditious attainment of the NAAQS in the area.

As discussed in the EPA's 1992 General Preamble, in the event that a state's attainment plan includes controls on major stationary sources for PM₁₀ in order to achieve timely attainment in the area, section 189(e) requires controls of all PM₁₀ precursors for major stationary sources located within the area, unless there is a showing that such sources do not contribute significantly to violations in the area (57 FR 13541). Thus, the EPA's interpretation of subpart 4 requirements with respect to precursors in attainment plans for PM₁₀ contemplates that states may develop attainment plans that regulate only those precursors that contribute significantly to nonattainment in the area in question, *i.e.*, states may determine that only certain precursors need be regulated for attainment purposes. *Id.*; *see also Assoc. of Irrigated Residents v. EPA, et al.*, 423 F.3d 989 (9th Cir. 2005). The EPA maintains that application of this same approach to PM_{2.5} precursors under subpart 4 is appropriate and reasonable (81 FR 58020-22).

The General Preamble describes the assessment of precursors as specific to each nonattainment area, and acknowledges that the determination of precursor significance would likely vary based on the characteristics of the area-wide nonattainment problem. The General Preamble further provides that in making a determination regarding the significance of precursors, the EPA will rely on technical information presented in the state's submittal, including filter analysis, the relative contribution to overall nonattainment, the selected control strategies, as well as other relevant factors (57 FR 13541). The recent PM_{2.5} Implementation

Rule also discusses the types of technical analyses that states may perform to demonstrate the significance or insignificance of a particular precursor. (81 FR 58020-22); 40 CFR 51.1006.

The IDEQ's 2012 SIP submittal contained a detailed analysis of the Logan UT-ID air shed (see Appendix A, Special Air Quality Studies, PM_{2.5} Saturation Studies - Utah State University). This study concluded that, "the Cache Valley (Logan UT-ID) PM_{2.5} nonattainment is somewhat uniquely a wintertime problem, when low lying, persistent radiation and subsidence inversions set up, trapping pollutants in the Valley for extended periods of time, thereby allowing photochemically-derived particulate material to become elevated. Chemical analysis by researchers at Utah's Division of Air Quality and Air Monitoring Center, as well as Utah State University, have shown that 50-95% of the PM_{2.5} collected at the Logan site is composed of ammonium nitrate (NH₄NO₃)." This secondary formation of ammonium nitrate is due in large part to NO_x and VOC emissions from onroad motor vehicles combining with the abundant levels of ammonia from small cattle operations, agricultural fields, and natural and constructed wetlands in the greater air shed, both within and surrounding the nonattainment area. The study concluded that, "based on measurements at the Logan location, the Valley's wintertime formation of ammonium nitrate was found to be limited by the availability of nitric acid (HNO₃). Furthermore, the report stated that the Cache Valley was found to be NH₃-rich by a factor of approximately two. Comparisons of wintertime ambient NH₃ concentrations between the Valley's urban area (Logan) and a rural location (Amalga), showed the rural area averaged ≈ 2.5 times the NH₃ of the urban site." As a result of this analysis, all scientific precursors to PM_{2.5}, including VOCs and ammonia, were considered as part of the 2012 SIP submittal and 2014 amendment.

G. Reasonably Available Control Technology / Reasonably Available Control Measures (RACT/RACM)

The general SIP planning requirements for nonattainment areas under subpart 1 include section 172(c)(1), which requires implementation of all RACM (including RACT). The CAA section 172(c) indicates that what constitutes RACM or RACT is related to what is necessary for attainment in a given area, as the provision states that nonattainment plans shall provide for attainment of the NAAQS in the area covered by the attainment plan.

The SIP requirements under subpart 4 likewise impose upon states an obligation to develop attainment plans that impose RACM and RACT on sources within a nonattainment area. Section 189(a)(1)(C) requires that states with areas classified as Moderate nonattainment areas must have SIP provisions to assure that RACM and RACT level controls are implemented by no later than four years after designation of the area. As with subpart 1, the terms RACM and RACT are not defined within subpart 4. Nor do the provisions of subpart 4 specify how states are to meet the RACM and RACT requirements. However, the EPA's longstanding guidance in the General Preamble provides recommendations for appropriate considerations for determining what control measures constitute RACM and RACT for purposes of meeting the statutory requirements of subpart 4.

The EPA's guidance for RACM under subpart 4 in the General Preamble includes: (1) A list of some potential measures for states to consider; (2) a statement of the EPA's expectation that the state will provide a reasoned explanation for a decision not to adopt a particular control measure; (3) recognition that some control measures might be unreasonable because the emissions from the affected sources in the area are *de minimis*; (4) an emphasis on state evaluation of potential control measures for reasonableness, considering factors such as

technological feasibility and the cost of control; and (5) encouragement that states evaluating potential control measures imposed upon municipal or other governmental entities also include consideration of the impacts on such entities, and the possibility of partial implementation when full implementation would be infeasible (*e.g.*, phased implementation of measures such as road paving). 57 FR 13540.

With respect to RACT requirements, the EPA's existing guidance in the General Preamble: (1) Noted that RACT has historically been defined as "the lowest emission limit that a source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility;" (2) noted that RACT generally applies to stationary sources, both stack and fugitive emissions; (3) suggested that major stationary sources be the minimum starting point for a state's RACT analysis; and (4) recommended that states evaluate RACT not only for major stationary sources, but for other source categories as needed for attainment and considering the feasibility of controls. *Id.* at 13541

For both RACM and RACT, the EPA notes that an overarching principle is that if a given control measure is not needed to attain the relevant NAAQS in a given area as expeditiously as practicable, then that control measure would not be required as RACM or RACT because it would not be reasonable to impose controls that are not in fact needed for attainment purposes. In making recommendations for the subpart 4 RACM and RACT requirements, the focus is upon the process to identify emissions sources, to evaluate potential emissions controls, and to impose those control measures that are reasonable and that are necessary to bring the area into attainment as expeditiously as practicable, but by no later than the attainment date for the area. The only exception is if the economically and technically feasible measures not necessary to

attain by the outermost attainment date and adopted as RACT/RACM will collectively advance attainment by at least a year. If that is the case, the additional measures must be adopted.

The new PM_{2.5} Implementation Rule adopts a process oriented analysis similar to the approaches set forth in the General Preamble and the remanded 2007 PM_{2.5} Implementation Rule (81 FR 58035-47); 40 CFR 51.1009.

Consistent with EPA guidance at the time, the IDEQ evaluated which measures would constitute RACM and RACT in Franklin County.

1. The IDEQ evaluated the technical and economic feasibility of establishing a motor vehicle inspection and maintenance (I&M) program for Franklin County (Appendix C of the 2012 SIP submittal). Modeling conducted by the UDAQ, using the EPA's Motor Vehicle Emission Simulator (MOVES) model, showed expected NO_x reductions of 4.6% from implementing an I&M program generally. Projecting this anticipated NO_x reduction to Franklin County's share of the overall Logan UT-ID motor vehicle fleet (approximately 10%) yields a potential NO_x reduction benefit of 0.46% for the air shed. The IDEQ estimated the cost of establishing an I&M program for Franklin County based on an existing I&M station in Canyon County, Idaho (population 198,871 in 2013). The IDEQ then scaled the potential costs of this program to reflect the population of Franklin (12,854 in 2013). The IDEQ found that while some variable costs may be reduced, the annual fixed costs of keeping a basic I&M station operational remained quite high (total annual estimated cost would be approximately \$300,000). The IDEQ calculated that dividing this annual cost by the expected NO_x emissions reduction for Franklin County (15 tons per year) yields an estimated cost per ton of NO_x reduced of at least \$20,000 per ton. The IDEQ also calculated the cost per vehicle (approximately 8574 vehicles) to be \$70 per vehicle based on a two year inspection cycle. Given ongoing vehicle fleet turnover with newer,

cleaner Tier 2 and 3 vehicles since the IDEQ's 2012 SIP submittal, these costs relative to expected NO_x reductions have likely increased as the small percentage of pre-1996 motor vehicles most likely to fail an I&M test for NO_x and VOC emissions are retired from the vehicle fleet. For these reasons, the IDEQ determined that a Franklin County I&M program was not a reasonable control approach based on factors including the cost of control and economic feasibility.

2. As discussed above, the General Preamble suggests that major stationary sources be the minimum starting point for a state's RACT analysis and recommended that states evaluate RACT not only for major stationary sources, but for other source categories as needed for attainment and considering the feasibility of controls. In developing the emissions inventories underlying the 2012 SIP submittal and 2014 amendment, the criteria of 40 CFR 51 for air emissions reporting requirements under the EPA's National Emissions Inventory (NEI) was used to establish a 100 tpy threshold for identifying stationary point sources. For Franklin County there are no point sources with the potential to emit 100 tpy of PM_{2.5} or any PM_{2.5} plan precursor. As described in Appendix B of the IDEQ's 2012 SIP submittal, emissions from point sources under the EPA's NEI reporting threshold of 100 tpy were included in the area source base-year emissions inventory. For Franklin County, due to its rural nature and general lack of industrial base, emissions from these industrial and commercial source categories are generally insignificant compared to other source categories. For these reasons, the IDEQ considered RACT requirements satisfied for Franklin County.

Table 1. Franklin County 2008 Winter Emissions Inventory in Tons per Episode Day

Source Category	PM _{2.5}	NO _x	SO ₂	VOC	NH ₃
Agriculture, crops, and livestock	0.008	0	0	2.763	4.65

Gasoline, bulk, and stations	0	0	0	0	0
Commercial cooking	0	0	0	0	0
Construction dust	0.014	0	0	0	0
Fuel combustion, industrial	0.006	0.087	0.061	0.001	0.002
Fuel combustion, commercial / institutional	0.004	0.07	0.018	0.001	0
Fuel combustion, residential non-wood	0.001	0.049	0.014	0.002	0.008
Fuel combustion, residential wood	0.1	0.009	0.002	0.138	0
Miscellaneous Commercial / Industrial Processes	0.001	0.001	0	0	0.008
Solvent, commercial and consumer	0	0	0	0.14	0
Solvent, commercial and industrial	0	0	0	0.26	0
Waste disposal	0	0	0	0.008	0
Mobile, emissions	0.028	0.711	0.004	0.498	0.008
Mobile, road dust	0.596	0	0	0	0
Nonroad mobile	0.035	0.428	0.009	0.636	0
Point sources	0	0	0	0	0
TOTALS	0.793	1.355	0.108	4.447	4.676

3. As previously discussed in the Control Measures section, the IDEQ submitted road sanding agreements negotiated between the IDEQ, Franklin County Road and Bridge, and the Idaho Department of Transportation to reduce PM_{2.5} emissions from re-entrained road dust. In our March 25, 2014 final approval of the road sanding agreements as voluntary measures, we explained that the agreements were not directly enforceable and could not be considered as full control measures, with full emission reduction credit under the attainment demonstration.³ As part of the 2014 amendment, the IDEQ submitted revised road sanding agreements to address the

³ Incorporating Emerging and Voluntary Measures in a State Implementation Plan (Sept. 2004)

EPA's enforceability concerns. While these revised road sanding agreements improve on potential enforceability, they still do not meet our enforceability criteria to be approved as full control measures meeting RACM requirements.

4. As previously discussed in the Control Measures section, the EPA approved the permanent and enforceable Franklin County, City of Clifton, City of Dayton, Franklin City, City of Oxford, City of Preston, and City of Weston ordinances implementing the mandatory woodstove curtailment and burn ban program (79 FR 16201, March 25, 2014). The EPA is now proposing to determine that these ordinances already approved into the Idaho SIP satisfy our criteria for RACM under subpart 1 and subpart 4. The EPA also notes that because the ordinances banned the sale or installation of non-EPA certified devices in new or existing buildings in Franklin County jurisdictions, the three woodstove change-out programs conducted in 2006-2007, 2011-2012, and 2013-2014, that replaced 212 units, can be considered to have permanent, enforceable, and lasting emission reductions in the nonattainment area, estimated to be 8.04 tpy PM_{2.5}, 0.47 tpy NO_x, and 18.57 tpy VOC.

The EPA is proposing to approve the woodstove curtailment, device restrictions and burn ban control measures discussed above, and already incorporated into the SIP, as meeting the requirements of RACM. We are proposing to approve IDEQ's determination that an I&M program for Franklin County is not economically feasible under RACM. We are also proposing to approve IDEQ's determination that RACT controls are not necessary given the lack of stationary sources in the county.

Not Possible to Advance Attainment by One Year

Under the attainment plan requirements, an area must implement all reasonable control measures that are not necessary to attain by the outermost attainment date, if such measures

would advance the date of attainment by an estimated one year. At the time of the IDEQ's December 24, 2014 amendment, the State and the EPA had access to monitoring data showing that it would not be possible to advance attainment by one year (December 31, 2014) due to expected 3-year average of 24-hour PM_{2.5} concentrations of 40 µg/m³ at the Franklin monitor, and 45 µg/m³ at the Logan, Utah monitor, based on preliminary 2012-2014 data. Therefore, we are proposing to approve IDEQ's determination that it was not possible to advance the attainment date by one-year and that they implemented all reasonable available control measures identified.

Precursors Addressed

As discussed in the "Characterization of the Franklin County Air Shed" section above, secondary formation of ammonium nitrate (NH₄NO₃) is the most dominant source of PM_{2.5} in the valley (approximately 80% of the PM_{2.5}). Due to the unique topography of being surrounded by steep mountain ranges approximately 3,000 to 5,000 feet above the Cache Valley floor, this air shed is particularly susceptible to wintertime inversion events. During these inversion events VOCs and NO_x emissions (primarily from on-road motor vehicles) are trapped in a shallow layer of air with ammonia emissions (primarily from agricultural operations) to form ammonium nitrate. The 2012 submittal included the Utah State University Special Air Quality Studies which determined that the air shed was ammonia rich by a factor of approximately two. Modeled sensitivity runs, conducted by UDAQ in cooperation with IDEQ, also showed that significant reductions in the ammonia inventories would have little to no effect on predicted PM_{2.5} concentrations.⁴ As such, one of the most significant control measures for the area as a whole, was Utah's establishment of an I&M program to reduce NO_x and VOCs from on-road

⁴ See page 17 of Cache Valley Air Quality Studies, included as Appendix A of IDEQ's 2012 SIP submission.

motor vehicles. As discussed above, IDEQ also assessed the economic feasibility of establishing an I&M program to reduce NO_x and VOCs, but found that the estimated \$20,000+ per ton reduction of NO_x renders the cost unreasonable and thus not RACM. IDEQ also considered other potential NO_x controls such as controls for home heating of natural gas or distillate oil, but determined it was prohibitively expensive given the tiny proportion of the emissions inventory for those sources (see Table 1). The potential for VOC and SO₂ reductions from Franklin County sources was similarly small. While the emissions inventory shows some potential for reducing VOC emission from commercial, consumer, and industrial solvents, IDEQ noted that many of these products are purchased in the more populous retail center in Logan, Utah. Therefore the Utah VOC controls for these products would have an air shed wide impact. Lastly, IDEQ notes that MOVES modeling conducted as part of the 2012 submittal, using a 2008 base year, predicted VOC emissions reductions from on-road mobile sources of 37% by January 1, 2015, due to fleet turnover with cleaner Tier 2 vehicles. IDEQ did assess potential SO₂, NO_x, VOC, and NH₃ reductions from Idaho-specific control measures. However, due to the sparse population and generally small emissions inventories, the direct PM_{2.5} control measures discussed above (woodstoves and road sanding) were deemed as the only viable and economically feasible measures possible to impose as RACM.

Overall RACM Analysis

IDEQ's analysis of potential control measures under RACM was informed by the emissions inventory for the area (see pages 23-29 of the 2012 submittal). As discussed above, many of the source categories in the Franklin County portion of the nonattainment area have negligible emissions due to the sparse population and rural nature of the county. IDEQ then analyzed the emissions inventory for SO₂, NO_x, VOC, NH₃, and direct PM_{2.5}, to determine

possible control measures (see pages 38-41). Pursuant to that analysis, IDEQ identified and established the mandatory woodstove curtailment program, burn ban, heating device restrictions and the woodstove change-out programs discussed above to satisfy the RACM requirement for the predominant emissions sources in the county, with estimated emission reductions greater than 0.13 tons per episode day. The IDEQ also determined reasonable measures beyond the Tier 2 Federal Motor Vehicle Emission Requirements, the diesel emission reduction program, the commuter bus service, and the Park-n-Ride lots already in place for the area are not available for mobile emissions. The EPA has reviewed the comprehensive emissions inventory information, as summarized in Table 1. Based on the 2012 submittal and 2014 amendment, the EPA proposes to find that IDEQ has satisfied the RACM requirement for the Idaho portion of the area.

H. Contingency Measures

Contingency measures are additional measures to be implemented in the event that an area fails to attain a standard by its attainment date, or fails to meet Reasonable Further Progress (RFP). *See* CAA section 172(c)(9); 81 FR 58066. These measures must be fully adopted rules or control measures that take effect with minimal further action by the state or the EPA.

Contingency measures should also contain trigger mechanisms and an implementation schedule. In addition, they should be measures not already included in the SIP control strategy, and should provide for emission reductions equivalent to one year of RFP.

The EPA explained that the April 16, 1992 General Preamble provided the following guidance: “States must show that their contingency measures can be implemented without further action on their part and with no additional rulemaking actions such as public hearings or legislative review. In general, EPA will expect all actions needed to affect full implementation of the measures to occur within 60 days after EPA notifies the State of its failure.” (57 FR at

13512). The statute requires that contingency measures provide for additional emission reductions that are not relied on for RFP or attainment and that are not included in the demonstration. The purpose of contingency measures is to provide a cushion while the plan is being revised to meet the missed milestone and continue progress towards expeditious attainment. In other words, contingency measures are intended to achieve reductions over and beyond those relied on in the attainment and RFP demonstrations.

In its 2012 SIP submittal, the IDEQ relied on two sets of measures as contingency measures: Idaho control measures that had already been adopted and implemented but which were not included or accounted for in UDAQ's attainment demonstration modeling; and the contingency measures included in Utah's 2012 SIP submission. IDEQ asserted that such measures collectively would achieve emission reductions resulting in a 0.2 µg per year reduction, equaling one year's worth of emission reductions necessary to achieve RFP at the time of IDEQ's 2012 submittal. While the IDEQ asserts that the 0.2 µg per year reduction would occur, the reductions are not quantified in the UDAQ modeling. The EPA is therefore proposing to disapprove the IDEQ's contingency measure plan element.⁵

I. Reasonable Further Progress (RFP) and Quantitative Milestones

For PM_{2.5} nonattainment areas, two statutory provisions apply regarding RFP and quantitative milestones. First, under subpart 1, CAA section 172(c)(2) requires attainment plans to provide for RFP, which is defined in CAA section 171(l) as "such annual incremental reductions in emissions of the relevant air pollutant as are required by [Part D of Title I] or may

⁵ We also note that the 9th Circuit Court of Appeals recently rejected EPA's interpretation of CAA section 172(c)(9) as allowing for early implementation of contingency measures. *Bahr v. EPA*, No. 12-72327 (Sept. 12, 2016). The Court concluded that contingency measures must take effect at the time the area fails to make RFP or attain by the applicable attainment date, not before. *Id.* at 35-36. The IDEQ control measures, which have already been implemented, do not meet the standard for section 172(c)(9) contingency measures set out by the *Bahr* decision.

reasonably be required by the Administrator for the purpose of ensuring attainment of the applicable national ambient air quality standard by the applicable date." Reasonable further progress is a requirement to assure that states make steady, incremental progress toward attaining air quality standards, rather than deferring implementation of control measures and thereby emission reductions until sometime just before the date by which the standard is to be attained. Second, under subpart 4, CAA section 189(c) requires that attainment plan submissions have "quantitative milestones which are to be achieved every 3 years until the area is redesignated to attainment and which demonstrate reasonable further progress...toward attainment by the applicable date."

The IDEQ's 2012 SIP submittal was developed to meet the subpart 1 RFP requirements, and the 2014 amendment was intended to address the D.C. Circuit's determination that the subpart 4 requirements apply to PM_{2.5} NAAQS; however, the IDEQ submittals do not include quantitative milestones as required pursuant to section 189(c). Specifically, section 189(c) provides that an attainment plan must have quantitative milestones which are to be achieved every three years until the area is redesignated to attainment, and which demonstrate reasonable further progress toward attainment by the applicable attainment date.⁶ While the SIP submittals did identify one measure of RFP (i.e. that the area will attain by the attainment date), the SIP submittals do not adequately address the RFP requirement or provide specific quantitative

⁶ The EPA's General Preamble and Addendum provide guidance interpreting the RFP and quantitative milestone requirements of subpart 4 and were available at the time IDEQ submitted the 2014 addendum. *See* General Preamble, 57 FR 13539; Addendum, 59 FR 42015-17. The EPA's guidance recommendations with respect to section 189(c) include several relevant features: (1) that the control measures comprising the RFP should be implemented and in place to meet the milestone requirement; (2) that it is reasonable for the three year periods for milestones to run from the date that the attainment plan submission is due; and (3) that the precise form quantitative milestones should take is not specified and they may take whatever form would allow progress to be quantified or measured adequately. The guidance contains a partial list of potential approaches, including percent implementation of control strategies, percent compliance with implemented control measures, and adherence to a compliance schedule. *See* Addendum, 59 FR 42016.

milestone as required pursuant to section 189(c). For this reason, we propose to disapprove the SIP with respect to the RFP and quantitative milestones requirements.

While the specific RFP and quantitative milestones requirements were not satisfied in the SIP submittals, the IDEQ's attainment plan did contain control measures that were implemented after the area was designated nonattainment. For example, the woodstove curtailment and burn ban ordinances were adopted and in place during the summer and fall of 2012. In addition, the woodstove change-out programs conducted in 2006-2007 and 2011-2012, had already commenced and achieved sustained and quantifiable emission reductions of 8.04 tons per year (tpy) PM_{2.5}, 0.47 tpy NO_x, and 18.57 tpy VOC. The IDEQ calculated the emissions reductions associated with the number of woodstoves exchanged in each of those years. In addition, the IDEQ quantified the estimated reduction in PM_{2.5} reentrained road dust emissions from the road sanding agreements effective July 16, 2012 and October 25, 2012. The control measures in the IDEQ's attainment plan were in place and achieving reductions within three years of submission. The State relied upon these control measures, in addition to the Utah control measures, to provide the bulk of the emissions reductions projected to bring the area into attainment, and those measures were achieving reductions during the three years from the subpart 4 attainment plan submission date. However, the IDEQ's SIP submittal did not specify whether such measures were also included for the purposes of RFP and quantitative milestones. If properly accounted for and specified in the SIP submittal, such reductions might be sufficient to provide the necessary demonstration of RFP for use in a quantitative milestones report.

J. Motor Vehicle Emissions Budget

Section 176(c) of the CAA requires Federal actions in nonattainment and maintenance areas to "conform to" the goals of SIPs. This means that such actions will not cause or contribute

to violations of a NAAQS, worsen the severity of an existing violation, or delay timely attainment of any NAAQS or any interim milestone. Actions involving Federal Highway Administration (FHWA) or Federal Transit Administration (FTA) funding or approval are subject to the transportation conformity rule (40 CFR part 93, subpart A). Under this rule, metropolitan planning organizations (MPOs) in nonattainment and maintenance areas coordinate with state air quality and transportation agencies, the EPA, the FHWA, and the FTA to demonstrate that their long-range transportation plans and transportation improvement programs (TIPs) conform to applicable SIPs. This demonstration is typically determined by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emissions budgets (budgets) contained in a SIP.

For budgets to be approvable, they must meet, at a minimum, the EPA's adequacy criteria (40 CFR 93.118(e)(4)). One of the adequacy criteria requires that motor vehicle emissions budgets when considered together with all other emissions sources, are consistent with the applicable requirements for reasonable further progress, attainment or maintenance (40 CFR 93.118(e)(4)((iv))). In this case the applicable requirement is attainment of the 2006 24-hour PM_{2.5} NAAQS. The Cache Valley NAA failed to attain the 2006 24-hour PM_{2.5} NAAQS by December 31, 2014.⁷ Therefore, the submitted motor vehicle emissions budgets do not meet the aforementioned adequacy criterion. We are proposing to disapprove the submitted budgets consistent with our proposed disapproval of the attainment demonstration for the Idaho portion of the area.

III. Consequences of a Disapproved SIP

⁷ December 31, 2014 is the attainment date associated with the motor vehicle emission budgets submitted as part of the 2012 submittal. Although IDEQ did submit revised emissions and attainment year inventories as part of the 2014 supplement, IDEQ did not explicitly submit revised budgets for the Subpart 4 attainment date of December 31, 2015).

This section explains the consequences of a disapproval of a SIP under section 110(k) of the Act. The Act provides for the imposition of sanctions and the promulgation of a federal implementation plan (FIP) if a state fails to submit and the EPA approve a plan revision that corrects the deficiencies identified by the EPA in its disapproval.

The Act's Provisions for Sanctions

If the EPA finalizes disapproval of a required SIP submission, such as an attainment plan submission, or a portion thereof, section 179(a) provides for the imposition of sanctions unless the deficiency is corrected within 18 months of the final rulemaking of disapproval. The first sanction would apply 18 months after the EPA disapproves the SIP. Under EPA's sanctions regulations, 40 CFR 52.31, the first sanction imposed at 18 months following a disapproval is 2:1 offsets for sources subject to the new source review requirements under section 173 of the Act. If the deficiency remains uncorrected at 24 months after the disapproval a second sanction is imposed consisting of a prohibition on the approval or funding of certain highway projects.⁸ The EPA also has authority under section 110(m) to impose sanctions on a broader area, but is not proposing to take such action in today's rulemaking. The imposition of sanctions is avoided or stopped by a final EPA rulemaking action finding that the state corrected the SIP deficiencies resulting in the disapproval.

Federal Implementation Plan Provisions That Apply if a State Fails To Submit an Approvable Plan

In addition to sanctions, if the EPA finds that a state failed to submit the required SIP revision or finalizes disapproval of the required SIP revision, or a portion thereof, the EPA must

⁸ On April 1, 1996 the US Department of Transportation published a notice in the Federal Register describing the criteria to be used to determine which highway projects can be funded or approved during the time that the highway sanction is imposed in an area. (See 61 FR 14363)

promulgate a FIP no later than 2 years from the date of the finding if the deficiency has not been corrected within that time period.

Ramifications Regarding Conformity

One consequence if EPA finalizes disapproval of a control strategy SIP submission is a conformity freeze.⁹ If we finalize the disapproval of the attainment demonstration SIP without a protective finding, a conformity freeze will be in place as of the effective date of the disapproval (40 CFR 93.120(a)(2)). The Idaho portion of the Cache Valley NAA is a “donut area” as defined in the transportation conformity rule (40 CFR 93.101).¹⁰ As such, the Idaho portion of the area does not have a metropolitan planning organization (MPO) and there is no long range transportation plan or TIP that would be subject to a freeze. However, the freeze does mean that no new projects in the Idaho portion of the Cache Valley NAA may be found to conform until another attainment demonstration SIP is submitted and the motor vehicle emissions budgets are found adequate or the attainment demonstration is approved.

IV. Proposed Action

The EPA is proposing to approve the woodstove curtailment ordinances, burn ban, heating device restrictions and woodstove change-out programs as meeting RACM requirements. However, for the reasons set forth above and because the area failed to attain by the December 31, 2015 attainment date, we are proposing to determine that the IDEQ has not satisfied the attainment demonstration, the contingency measures, the RFP and quantitative milestone, and the motor vehicle emission budget requirements for the Franklin County portion of the Logan UT-ID area. As such, we are proposing to disapprove these elements.

⁹ Control strategy SIP revisions as defined in the transportation conformity include reasonable further progress plans and attainment demonstrations (40 CFR 93.101).

¹⁰ The Cache Metropolitan Planning Organization is responsible for transportation planning in a portion of Cache County, UT which is part of this nonattainment area.

V. Statutory and Executive Order Reviews

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);

- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- Does not provide the EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply on any Indian reservation land in Idaho or any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: October 18, 2016.

Dennis J. McLerran,
Regional Administrator,
Region 10.

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